

**BROOKHAVEN**  
NATIONAL LABORATORY

Managed by Brookhaven Science Associates  
for the U.S. Department of Energy

January 10, 2011

Ms. Mary La Flair  
Suffolk County Department of Health Services  
Office of Water Resources  
Bureau of Drinking Water  
Suite 1C  
360 Yaphank Avenue  
Yaphank, New York 11980

Dear Ms. Mary La Flair:

**Subject: Monthly Water Treatment Plant Reports**  
**Reference: Suffolk County Minimum Monitoring Requirements for December 2010**

In accordance with the requirements of the BNL Potable Water System Sampling Plan and the 2010 SCDHS Minimum Monitoring Requirements for the BNL Potable Water Supply, included please find the following attachments for your records:

Attachment I:	BNL Potable Water Monthly Operational Data for December.
Attachment II:	December 2010 Biweekly Water Quality Monitoring Data for the BNL Distribution System and Potable Water Wells.
Attachment III:	December 2010 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data and Bacteriological Analyses for the BNL Distribution System.

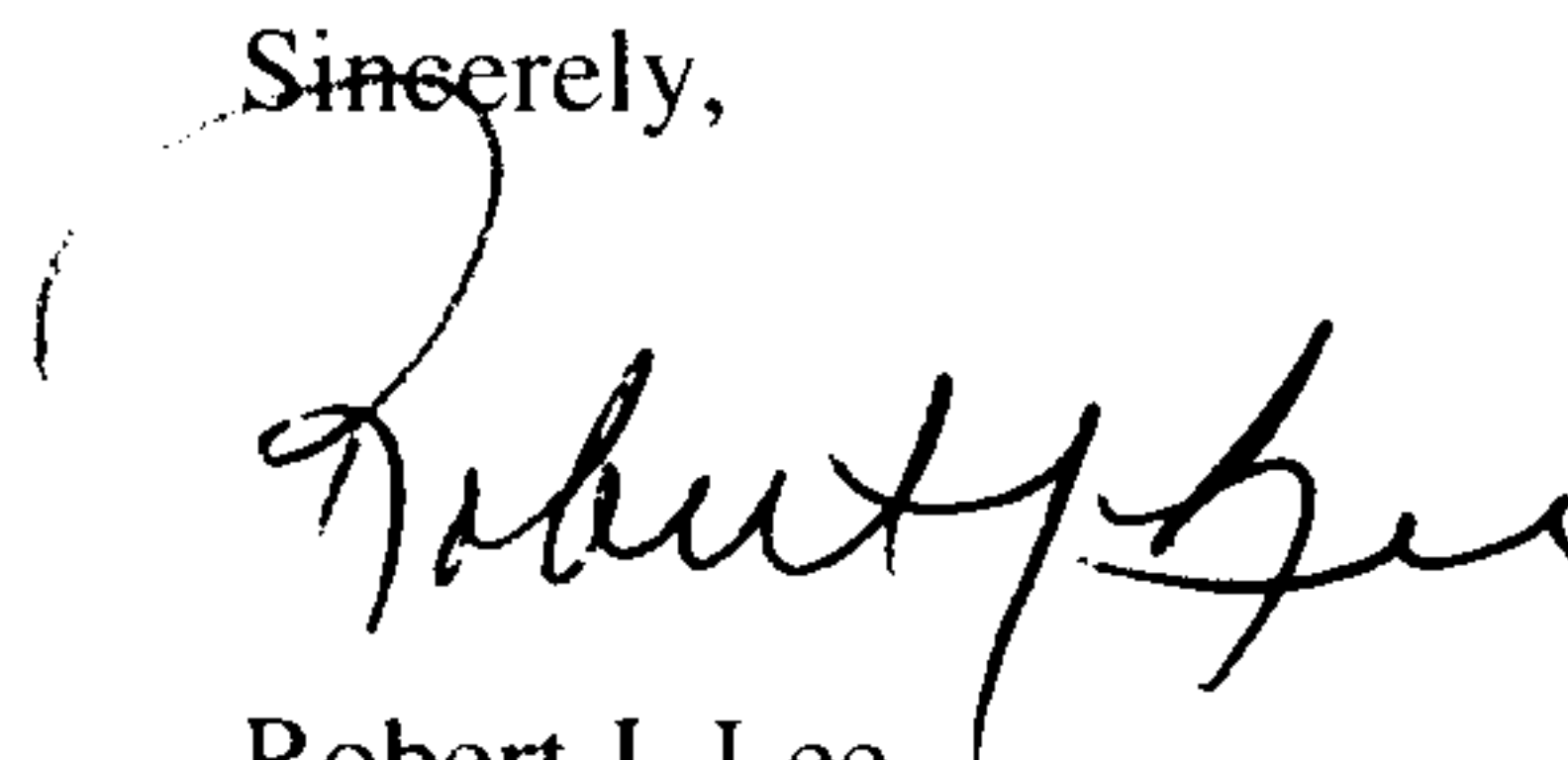
Collection and analysis of these samples is performed in accordance with the guidelines of the BNL Quality Assurance program, the SCDHS Community Water Supply Monitoring Requirements, and the BNL Potable Water System Sampling Plan. Facility and Operations Directorate personnel using standard operating procedures collect routine monitoring samples; a contractor laboratory using standard methods of analysis performs the subsequent analyses. The Quality Assurance documentation is available from the Environmental Protection Division and Facility and Operations Directorate. Based on this information, we believe the values contained in these reports are



representative of the BNL potable water system and review of the analytical data shows that BNL's potable water system complied with all drinking water requirements during this reporting period.

Should there be any questions regarding this report or the analytical or operational data contained herein, please call either J. Higbie at (631) 344-5919, R. Lee at (631) 344-3148, or W. Chaloupka at (631) 344-7136.

Sincerely,



Robert J. Lee  
Interim Manager  
Environmental Protection Division

RJL/JR:jlh

Attachments: As noted

cc:	W. Chaloupka	w/attachments
	D. Feldman, SCDHS	w/attachments
	G. Goode	w/o attachments
	G. Granzen	w/attachments
	J. Higbie	w/attachments
	J. Hime, SCDHS	w/o attachments
	R. Lee	w/attachments
	E. Murphy	w/attachments
	J. Remien	w/o attachments
	L. Ross	w/o attachments

File: EC61ER.11

**ATTACHMENT I**

**Brookhaven National Laboratory**

**Potable Water Supply**

**Monthly Operational Data for December 2010**

**for the BNL Potable Water System**

# Water Systems Operation Report

## Water Treatment Facility

Public Water System Name		Reporting Month/Year		Date Report Submitted		Source Water Type(s)	
Brookhaven National Laboratory		DEC2010		12/31/2010		<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI	
Public Water System ID		County		Town, Village, or City		<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination	
5111891		Suffolk		Upton, New York 11973			


DATE	Source(s) in Use Well(s) No.:	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings				
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l) (WTF-624)	Hypochlorite used/day (WTF - 624)	pH Lime Softening (WTF-624)	pH (Incoming RAW Water)	Daily Totalizer	
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)						
					172						1,745,303
1	7+4+6	752	NA	NA	168	0.87	4	7.5	6.2		1,746,055
2	7+4+6	694	NA	NA	163	0.85	5	7.7	6.0		1,746,749
3	7+4+6	698	NA	NA	159	0.83	4	7.6	6.1		1,747,447
4		-	NA	NA							
5		-	NA	NA							
6	7+4+6	2,018	NA	NA	145	1.18	14	7.6	6.0		1,749,465
7	7+4+6	659	NA	NA	140	0.96	5	7.6	6.0		1,750,124
8	11+7+4	246	NA	NA	140	0.36	off	7.4	off		1,750,370
9	7+4+6	520	NA	NA	135	1.01	5	7.7	6.0		1,750,890
10	7+4+6	564	NA	NA	130	1.02	5	7.9	6.0		1,751,454
11		-	NA	NA							
12		-	NA	NA							
13	7+4+6	1,759	NA	NA	120	0.90	10	7.7	6.1		1,753,213
14	7+4+6	795	NA	NA	115	1.10	5	7.8	6.1		1,754,008
15	7+4+6	1,041	NA	NA	105	0.98	10	7.8	6.1		1,755,049
16	7+4+6	1,346	NA	NA	90	1.00	15	7.2	6.1		1,756,395
17	7+4+6	1,045	NA	NA	80	0.94	10	7.7	5.9		1,757,440
18		-	NA	NA							
19		-	NA	NA							
20	7+4+6	4,024	NA	NA	45	0.80	35	7.4	0.6		1,761,464
21	7+4+6	1,542	NA	NA	30+130	0.93	15	7.8	5.9		1,763,006
22	7+4+6	1,491	NA	NA	150	0.75	10	7.5	6.2		1,764,497
23	7+4+6	1,271	NA	NA	140	0.82	10	7.8	6.1		1,765,768
24	7+4+6	602	NA	NA	132	1.00	8	8.0	5.9		1,766,370
25		-	NA	NA							
26		-	NA	NA							
27		-	NA	NA							1,766,370
28	7+4+6	2,566	NA	NA	110	0.95	22	7.2	6.0		1,768,936
29	7+4+6	852	NA	NA	100	1.00	10	7.5	6.0		1,769,788
30	7+4+6	931	NA	NA	90+100=190	1.50	10	7.8	5.9		1,770,719
31	7+4+6	915	NA	NA	180	1.60	10	7.8	5.9		1,771,634
Total		26,331	DAY'S	31			222				
AVG.		849.39				0.97	10.6				

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: **Lowell Ross**

Title: **Water Systems Supervisor**

NYS DOH Operator Certification Number: **NY0031941**

Signature: 

Date: **1-5-11**

Operator Grade Level **1A-SW/GUI**




Public Water System Name			Reporting Month/Year		Date Report Submitted		Source Water Type(s)			
Brookhaven National Laboratory			DEC 2010		12/31/2010		<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI <input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination			
Public Water System ID			County		Town, Village, or City					
5111891			Suffolk		Upton, New York 11973					


DATE	Source(s) in Use Well No.: 4	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings				
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l)	Hypochlorite used/day			Daily Totalizer	
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)							
					114						2,081,970
1	4	274	NA	NA	108	0.50	6				2,082,244
2	4	277	NA	NA	102	0.41	6				2,082,521
3	4	239	NA	NA	97+47	0.50	5				2,082,760
4		-	NA	NA							
5		-	NA	NA							
6	4	580	NA	NA	132	0.39	12				2,083,340
7	4	229	NA	NA	127	0.30	5				2,083,569
8	4	90	NA	NA	126	0.30	1				2,083,659
9	4	151	NA	NA	122	0.22	4				2,083,810
10	4	91	NA	NA	120+30=150	0.43	2				2,083,901
11		-	NA	NA							
12		-	NA	NA							
13	4	553	NA	NA	135	0.54	15				2,084,454
14	4	212	NA	NA	129	0.15	6				2,084,666
15	4	449	NA	NA	120	0.30	9				2,085,115
16	4	693	NA	NA	108	0.84	12				2,085,808
17	4	633	NA	NA	93+75=150	0.40	15				2,086,441
18		-	NA	NA							
19		-	NA	NA							
20	4	2,002	NA	NA	108	0.01	42				2,088,443
21	4	799	NA	NA	93	0.04	15				2,089,242
22	4	722	NA	NA	78+72	0.49	15				2,089,964
23	4	655	NA	NA	138	0.44	12				2,090,619
24	4	244	NA	NA	132	0.42	6				2,090,863
25		-	NA	NA							
26		-	NA	NA							
27		-	NA	NA	132						2,090,863
28	4	755	NA	NA	117	0.38	15				2,091,618
29	4	324	NA	NA	111	0.48	6				2,091,942
30	4	440	NA	NA	105+45=150	0.54	7				2,092,382
31	4	461	NA	NA	138	0.80	12				2,092,843
<b>Total</b>		10,873	DAY'S	31			228				
<b>AVG.</b>		350.74				0.40	10.4				

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell RossTitle: Water Systems SupervisorNYS DOH Operator Certification Number: NY0031941Signature: Date: 1-5-11Operator Grade Level 1A-SW/GUI

Public Water System Name		Reporting Month/Year		Date Report Submitted		Source Water Type(s)			
Brookhaven National Laboratory		DEC 2010		12/31 10		<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI			
Public Water System ID		County		Town, Village, or City		<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination			
5111891		Suffolk		Upton, New York 11973					
DATE	Source(s) in Use Well No.: 6	Treated water volume (1,000 gallons/day)	Chlorination			Free chlorine residual at entry point (mg/l)	Hypochlorite used/day	Other Treatments / Readings	Daily Totalizer
			Gaseous Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Liquid Hypochlorite (gallons) Hypochlorite in Tank				
					144				838,700
1	6	-	NA	NA	141	0.50	3		838,700
2	6	127	NA	NA	140	0.41	1		838,827
3	6	-	NA	NA	140	0.50			838,827
4		-	NA	NA					
5		-	NA	NA					
6	6	90	NA	NA	135	0.39	5		838,917
7	6	42	NA	NA	135	0.30			838,959
8	6	-	NA	NA	135	off			838,959
9	6	17	NA	NA	134	0.22	1		838,976
10	6	-	NA	NA	130	0.43	4		838,976
11		-	NA	NA					
12		-	NA	NA					
13	6	58	NA	NA	130	0.54			839,034
14	6	104	NA	NA	126	0.15	4		839,138
15	6	209	NA	NA	123	0.30	3		839,347
16	6	179	NA	NA	120	0.84	3		839,526
17	6	327	NA	NA	108	0.40	12		839,853
18		-	NA	NA					
19		-	NA	NA					
20	6	832	NA	NA	90	0.01	18		840,685
21	6	280	NA	NA	81	0.04	9		840,965
22	6	217	NA	NA	75+65	0.49	6		841,182
23	6	336	NA	NA	132	0.44	8		841,518
24	6	23	NA	NA	130	0.42	2		841,541
25		-	NA	NA					
26		-	NA	NA					
27		-	NA	NA					841,541
28	6	242	NA	NA	120	0.38	10		841,783
29	6	148	NA	NA	117	0.48	3		841,931
30	6	159	NA	NA	114+26=150	0.54	3		842,090
31	6	171	NA	NA	144	0.80	6		842,261
<b>Total</b>		3,561	DAT'S	31			101		
<b>AVG.</b>		114.87				0.41	5.6		

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock


Reported by: **Lowell Ross**Title: **Water Systems Supervisor**NYS DOH Operator Certification Number: **NY0031941**Signature: Date: **1-5-11**Operator Grade Level **1A-SW/GUI**

Public Water System Name		Reporting Month/Year		Date Report Submitted		Source Water Type(s)	
Brookhaven National Laboratory		DEC 2010		12/31/2010		<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI	
Public Water System ID		County		Town, Village, or City		<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination	
5111891		Suffolk		Upton, New York 11973			

DATE	Source(s) in Use Well No.: 7	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings			Daily Totalizer
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l)	Hypochlorite used/day			
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons) Hypochlorite in Tank					
					84					3,167,750
1	7	650	NA	NA	66	0.50	18			3,168,400
2	7	609	NA	NA	60	0.41	6			3,169,009
3	7	653	NA	NA	48+93	0.50	12			3,169,662
4		-	NA	NA						
5		-	NA	NA						
6	7	1,686	NA	NA	115	0.39	26			3,171,348
7	7	547	NA	NA	105	0.30	10			3,171,895
8	7	167	NA	NA	102	off	3			3,172,062
9	7	402	NA	NA	93	0.22	9			3,172,464
10	7	627	NA	NA	80+70=150	0.43	13			3,173,091
11		-	NA	NA						
12		-	NA	NA						
13	7	1,540	NA	NA	117	0.54	33			3,174,631
14	7	685	NA	NA	108	0.15	9			3,175,316
15	7	750	NA	NA	99	0.30	9			3,176,066
16	7	925	NA	NA	85	0.84	9			3,176,991
17	7	847	NA	NA	75+75=150	0.40	10			3,177,838
18		-	NA	NA						
19		-	NA	NA						
20	7	2,816	NA	NA	112	0.01	38			3,180,654
21	7	1,091	NA	NA	93	0.04	19			3,181,745
22	7	1,021	NA	NA	75+75	0.49	18			3,182,766
23	7	902	NA	NA	132	0.44	18			3,183,668
24	7	482	NA	NA	123	0.42	9			3,184,150
25		-	NA	NA						
26		-	NA	NA						
27		-	NA	NA						3,184,150
28	7	2,277	NA	NA	78	0.38	45			3,186,427
29	7	539	NA	NA	69	0.48	9			3,186,966
30	7	616	NA	NA	57+93=150	0.54	12			3,187,582
31	7	691	NA	NA	138	0.80	12			3,188,273
Total		20,523	DAY'S	31			347			
AVG.		662.03				0.41	15.8			

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell RossTitle: Water Systems SupervisorNYS DOH Operator Certification Number: NY0031941Signature: Date: 1-5-11Operator Grade Level 1A-SW/GUI



## NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

## Water Systems Operation Report


Well No. 10 - Direct Supply to Distribution System

Public Water System Name			Reporting Month/Year		Date Report Submitted		Source Water Type(s)		
Brookhaven National Laboratory			DEC 2010		12/31/2010		<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI		
Public Water System ID			County		Town, Village, or City		<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination		
5111891			Suffolk		Upton, New York 11973				

DATE	Source(s) in Use Well No.: 10	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings			
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l)	Hypochlorite used/day	pH Sodium Hypochloride		Daily Totalizer
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)					
					45					821,220
1	10	-	NA	NA	45	NR				821,220
2	10	-	NA	NA	45	NR				821,220
3	10	-	NA	NA	45	NR				821,220
4		-	NA	NA						
5		-	NA	NA						
6	10	3	NA	NA	45	NR				821,223
7	10	-	NA	NA	45	NR				821,223
8	10	-	NA	NA	45	NR				821,223
9	10	-	NA	NA	45	NR				821,223
10	10	-	NA	NA	45	NR				821,223
11		-	NA	NA						
12		-	NA	NA						
13	10	-	NA	NA	45	NR				821,223
14	10	-	NA	NA	45	NR				821,223
15	10	-	NA	NA	45	NR				821,223
16	10	-	NA	NA	45	NR				821,223
17	10	-	NA	NA	45	NR				821,223
18		-	NA	NA						
19	10	1	NA	NA	45	NR				821,224
20	10	-	NA	NA	45	NR				821,224
21	10	-	NA	NA	45	NR				821,224
22	10	-	NA	NA	45	NR				821,224
23	10	-	NA	NA	45	NR				821,224
24		-	NA	NA						
25		-	NA	NA						
26		-	NA	NA						821,224
27	10	-	NA	NA	45	NR				821,224
28	10	-	NA	NA	45	NR				821,224
29	10	20	NA	NA	45	NR				821,244
30	10	-	NA	NA	45	NR				821,244
31	10	-	NA	NA	45	NR				821,244
Total		24	DAY'S	31.00						
AVG.		0.77								

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell RossTitle: Water Systems SupervisorNYS DOH Operator Certification Number: NY0031941Signature: Date: 1-5-11Operator Grade Level 1A-SW/GUI




Public Water System Name			Reporting Month/Year		Date Report Submitted		Source Water Type(s)			
Brookhaven National Laboratory			DEC 2010		12/31/2010		<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI			
Public Water System ID			County		Town, Village, or City		<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination			
5111891			Suffolk		Upton, New York 11973					


DATE	Source(s) in Use Well No.: 11	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings			
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l)	Hypochlorite used/day	pH Sodium Hypochloride	Daily Totalizer	
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons Hypochlorite in Tank)					
					100					123,919
1	11	-	NA	NA	100					123,919
2	11	1	NA	NA	100					123,920
3	11		NA	NA	100					123,920
4		-	NA	NA						
5		-	NA	NA						
6	11	2	NA	NA	100					123,922
7	11	-	NA	NA	100					123,922
8	11	512	NA	NA	99	0.78	1			124,434
9	11	-	NA	NA	99					124,434
10	11	-	NA	NA	99					124,434
11		-	NA	NA						
12		-	NA	NA						
13	11	-	NA	NA	96					124,434
14	11	2	NA	NA	96					124,436
15	11	-	NA	NA	96					124,436
16	11	-	NA	NA	96					124,436
17	11	48	NA	NA	96					124,484
18		-	NA	NA						
19		-	NA	NA						
20	11	337	NA	NA	84	NR	12			124,821
21	11	199	NA	NA	72	0.74	12			125,020
22	11	42	NA	NA	72+43	NR				125,062
23	11	-	NA	NA	115	NR				125,062
24	11	-	NA	NA	115	NR				125,062
25		-	NA	NA						
26		-	NA	NA						
27		-	NA	NA						125,062
28	11	-	NA	NA	115	NR				125,062
29	11	-	NA	NA	115	NR				125,062
30	11	-	NA	NA	115	NR				125,062
31	11	-	NA	NA	115	NR				125,062
Total		1,143	DAY'S	31			25			
AVG.		38.10				0.76	8.33			

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: **Lowell Ross**Title: **Water Systems Supervisor**NYS DOH Operator Certification Number: **NY0031941**Signature: Date: **1-5-11**Operator Grade Level **1A-SW/GUI**

Public Water System Name		Reporting Month/Year		Date Report Submitted		Source Water Type(s)				
Brookhaven National Laboratory		DEC 2010		12/31/2010		<input type="checkbox"/> Surface <input checked="" type="checkbox"/> Ground <input type="checkbox"/> GWUDI				
Public Water System ID		County		Town, Village, or City		<input type="checkbox"/> Purchase with subsequent chlorination <input type="checkbox"/> Purchase w/out subsequent chlorination				
5111891		Suffolk		Upton, New York 11973						
DATE	Source(s) in Use Well No.: 12	Treated water volume (1,000 gallons/day)	Chlorination				Other Treatments / Readings			Daily Totalizer
			Gaseous		Liquid	Free chlorine residual at entry point (mg/l)	Hypochlorite used/day	pH Sodium Hypochloride		
			Cylinder weight (lbs.)	Chlorine used per day (lbs.)	Hypochlorite (gallons) Hypochlorite in Tank					
					OOS					OOS
1	12		NA	NA	OOS					OOS
2	12		NA	NA	OOS					OOS
3	12		NA	NA	OOS					OOS
4		-	NA	NA						
5		-	NA	NA						
6	12		NA	NA	OOS					OOS
7	12		NA	NA	OOS					OOS
8	12		NA	NA	OOS					OOS
9	12		NA	NA	OOS					OOS
10	12		NA	NA	OOS					OOS
11		-	NA	NA						
12		-	NA	NA						
13	12		NA	NA	OOS					OOS
14	12		NA	NA	OOS					OOS
15	12		NA	NA	OOS					OOS
16	12		NA	NA	OOS					OOS
17	12		NA	NA	OOS					OOS
18		-	NA	NA						
19		-	NA	NA						
20	12		NA	NA	OOS					OOS
21	12		NA	NA	OOS					OOS
22	12		NA	NA	OOS					OOS
23	12		NA	NA	OOS					OOS
24	12		NA	NA	OOS					OOS
25		-	NA	NA						
26		-	NA	NA						
27	12		NA	NA	OOS					OOS
28	12		NA	NA	OOS					OOS
29	12		NA	NA	OOS					OOS
30	12		NA	NA	OOS					OOS
31	12		NA	NA	OOS					OOS
Total		-	DAY'S	31						
AVG.		-								

Chlorine Mix Ratio = \_\_\_\_\_ quarts/gallons of \_\_\_\_\_ % chlorine added to \_\_\_\_\_ gallons of water in crock

Reported by: Lowell RossTitle: Water Systems SupervisorNYS DOH Operator Certification Number: NY0031941Signature: Date: 1-5-11Operator Grade Level 1A-SW/GUI

PUMP DATA DECEMBER 2010  
(Month)

Date	Well 4	Well 6	Well 7	Well10	Well11	Well12	Daily Total
1	274	0	650	0	0		924
2	277	127	609	0	1	0	1,014
3	239	0	653	0		0	892
4	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0
6	580	90	1,686	3	2	0	2,361
7	229	42	547	0	0	0	818
8	90	0	167	0	512	0	769
9	151	17	402	0	0	0	570
10	91	0	627	0	0	0	718
11	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0
13	553	58	1,540	0	0	0	2,151
14	212	104	685	0	2	0	1,003
15	449	209	750	0	0	0	1,408
16	693	179	925	0	0	0	1,797
17	633	327	847	0	48	0	1,855
18	0	0	0	0	0	0	0
19	0	0	0	1	0	0	1
20	2,002	832	2,816	0	337	0	5,987
21	799	280	1,091	0	199	0	2,369
22	722	217	1,021	0	42	0	2,002
23	655	336	902	0	0	0	1,893
24	244	23	482	0	0	0	749
25	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0
28	755	242	2,277	0	0	0	3,274
29	324	148	539	20	0	0	1,031
30	440	159	616	0	0	0	1,215
31	461	171	691	0	0	0	1,323
Total	10,873	3,561	20,523	24	1,143	0	36,124

	Totalizer This Month	Totalizer Last Month	Total(x1,000) Gallons
Well 4	2,092,843	2,081,970	10,873
Well 6	842,261	838,700	3,561
Well 7	3,188,273	3,167,750	20,523
Well 10	821,244	821,220	24
Well 11	125,062	123,919	1,143
Well 12	0	OOS	#VALUE!

AGS Water Supply Meter      996,459      988,858      7601.00

Biology Building - Well 9      6,795,700      6,795,700      0.00



Microbiological Samples and Free Chlorine Residual

Sample Location	Date of Sample	Sample Type 1.Routine 2.Repeat	Total Coliform Positive	E.coli Positive	Free Chlorine Residual (mg/l)	Population Served: 3,500
B-49 WATER TOWER 094-273	7-Dec	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.86	Number of microbiological monitoring samples required: 4
B-640 WATER TOWER 076-408	7-Dec	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.41	Number of microbiological monitoring samples taken: 7
B 1005 RHIC 045-12	7-Dec	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.65	Did an M&R violation occur? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B 363 APART. LAUNDRY 109-19	7-Dec	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.47	If "Yes," check reason (s) below: Actual number of samples is fewer than required Did not collect/analyze repeat sample.
B-725 NSLS 075-602	7-Dec	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.43	Did not collect/analyze for E. coli for positive total coliform from routine/repeat
B 490 BLOCK 1 ACF 084-69	7-Dec	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.65	Did an MCL violation occur? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B490 BLOCK 4 MRC 084-68	7-Dec	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.41	If "Yes," check reason(s) below (see also Part 5, Table 6 for additional information). For systems collecting less than 40 samples per month: two or more of the samples (routine and /or repeat) are positive for total coliform (= total coliform MCL violation).
FIELD DUP. B-640 076-408	7-Dec	1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0.41	For systems collecting 40 or more samples per month: more than 5% of the samples (routine and/or repeat) are positive for total coliform (= total coliform MCL violation).
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		The original sample was E.coli positive and at least 1 repeat sample was positive for total
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		Reminder: System must collect a minimum of five (5) routine microbiological monitoring samples during the month following a repeat sample collection.
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		As required by 5-1.72, "Operation of a Public Water System," a copy of this form shall be sent to your local health department by the 10th calendar day of the next reporting period.
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Sample Collector(s): JOHN KULESA

Name of NYSDOH Certified Laboratory: Eco Test Lab , 377 Sheffield Ave. N. Babylon NY

Did any MCL violation occur? If so, please describe: No

Did an emergency or low pressure problem occur? Did source water bypass an existing treatment process in the system? If so, please explain.

No

Comments:

**ATTACHMENT II**

**Brookhaven National Laboratory**

**Potable Water Supply**

**December 2010 Biweekly Water Quality Monitoring Data  
for the BNL Distribution System and Potable Water Wells**

**Attachment II**  
**Table 1 - Summary of Water Quality Analyses**  
**for the BNL Potable Water System**  
**December 2010**

<b>Sample Location</b>	<b>Sample Date</b>	<b>pH (SU)</b>	<b>Temperature (Degrees F)</b>	<b>Conductivity (µmhos)</b>	<b>Alkalinity (mg/L)</b>	<b>Calcium (mg/L)</b>
WTP	12/2/10	7.7	56	167	ANR	ANR
WTP	12/7/10	7.6	56	194	ANR	ANR
WTP	12/9/10	7.7	56	189	ANR	ANR
WTP	12/14/10	7.8	56	165	ANR	ANR
WTP	12/16/10	7.2	58	171	ANR	ANR
WTP	12/21/10	7.8	56	178	ANR	ANR
WTP	12/23/10	7.9	56	189	ANR	ANR
WTP	12/27/10	7.2	55	165	ANR	ANR
WTP	12/30/10	7.8	56	178	ANR	ANR
Well 11	12/2/10	7.3	55	185	ANR	ANR
Well 11	12/21/10	7.4	56	211	ANR	ANR

**ANR-** Analysis Not Required

**NR-** Not Reported

**Note:** Field parameters are only conducted for facilities that are in operation on the day of measurement.



**ATTACHMENT III**

**Brookhaven National Laboratory**

**Potable Water Supply**

**December 2010 Stage 1 Disinfectants & Disinfection Byproduct Rule**

**Monitoring Data and Bacteriological Analyses for the BNL Distribution System**

Attachment III

December 2010 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data

Table II - Maximum Residual Disinfectant Level (MRDL) Compliance

Location	Total Residual Chlorine (mg/L)											
	Jan. 10	Feb. 10	Mar. 10	Apr. 10	May 10	June 10	July 10	Aug. 10	Sept. 10	Oct. 10	Nov. 10	Dec. 10
Bldg. 49 Water Tower	0.6	0.5	0.8	0.8	0.6	0.8	0.7	0.7	0.9	0.8	0.6	0.9
Bldg. 640 Water Tower	0.6	0.4	0.5	0.7	0.6	0.5	0.5	0.5	0.8	0.4	0.6	0.4
Bldg. 363 Apt. Laundry	0.4	0.4	0.4	0.7	0.6	0.4	1	0.7	0.4	0.9	0.3	0.5
Bldg. 1005 RHIC	0.6	0.4	0.4	0.3	0.6	0.4	0.4	0.6	0.4	0.4	0.6	0.7
Bldg. 930 LINAC	0.7	NS	0.5	NS	0.8	NS	0.6	NS	0.9	NS	0.6	NS
Bldg. 725 NSLS	NS	0.8	NS	0.5	NS	0.6	NS	0.7	NS	0.6	NS	0.4
Bldg. 490 Outpatient Clinic	0.7	NS	0.5	NS	0.4	NS	0.4	NS	0.7	NS	0.5	NS
Bldg. 490 Block 11	0.5	NS	0.5	NS	0.5	NS	0.7	NS	0.7	NS	0.7	NS
Bldg. 490 Block 1 ACF	NS	0.4	NS	0.5	NS	0.8	NS	0.8	NS	0.8	NS	0.7
Bldg. 490 Block 4 MRC	NS	1.1	NS	0.9	NS	0.4	NS	0.5	NS	0.9	NS	0.4
Monthly Average	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6	0.7	0.7	0.5	0.6

NA - Not Applicable  
NS- Not Scheduled for sampling

Running Annual Average (mg/L)

0.6

(Total Residual Chlorine)

MRDL (mg/L)

4.0

EcoTest Laboratories Inc  
377 Sheffield Ave  
North Babylon, NY 11703  
631 422-5777

LAB NO.105655.01

12/10/10

Brookhaven National Laboratory  
Bldg. 452, P.O. Box 5000  
Upton, NY 11973-5000

ATTN: William Chaloupka

PO#:0000143228

SOURCE OF SAMPLE: 094-273

SOURCE OF SAMPLE: 28939

COLLECTED BY: Client

DATE COL'D:12/07/10 RECEIVED:12/07/10

TIME COL'D:0720

MATRIX:W

SAMPLE: B-49 Water Tower  
28939-001

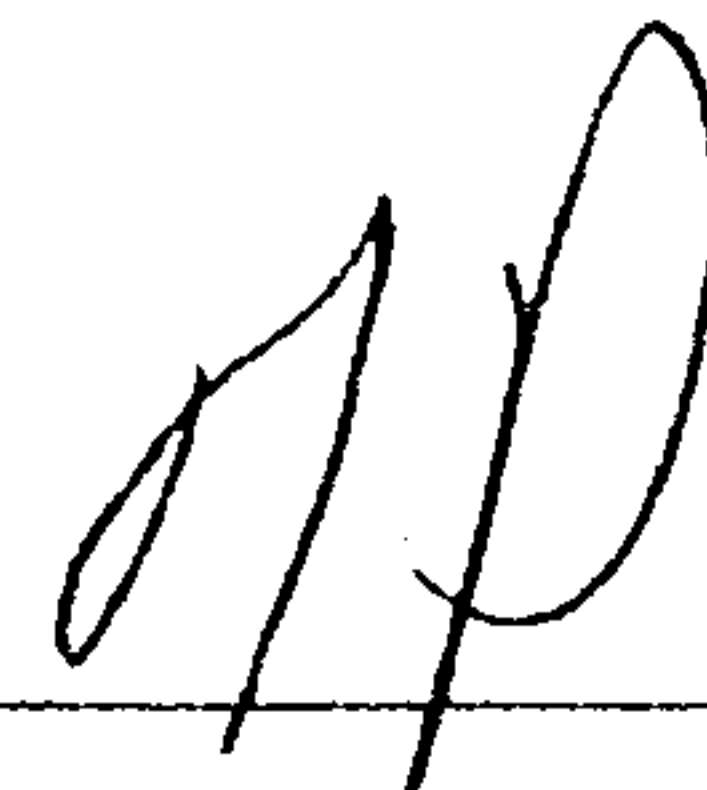
ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME	FLAG OF ANALYSIS	LRL	ANALYTICAL METHOD
T.Coliform, 100 mL		Absent	120710 1409		0	S189223
E.Coli, 100mL		Absent	120710 1409		0	S189223
Free Chlorine Resid.	mg/L	0.86		*		

cc:BNL, Robert J. Lee

LRL=laboratory Reporting Limit

REMARKS: \* Measured in the field by client.  
Total Coliform Bacteria is within NY State and Federal  
limit for potable water

DIRECTOR





EcoTest Laboratories Inc  
377 Sheffield Ave  
North Babylon, NY 11703  
631 422-5777

LAB NO.105655.02

12/10/10

Brookhaven National Laboratory  
Bldg. 452, P.O. Box 5000  
Upton, NY 11973-5000  
ATTN: William Chaloupka PO#:0000143228

SOURCE OF SAMPLE: 076-408  
SOURCE OF SAMPLE: 28939  
COLLECTED BY: Client DATE COL'D:12/07/10 RECEIVED:12/07/10  
TIME COL'D:0615  
MATRIX:W SAMPLE: B-640 Water Tower  
28939-002

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME	FLAG OF ANALYSIS	LRL	ANALYTICAL METHOD
T.Coliform, 100 mL		Absent	120710 1409	0		S189223
E.Coli, 100mL		Absent	120710 1409	0		S189223
Free Chlorine Resid.	mg/L	0.41		*		

cc:BNL, Robert J. Lee

LRL=laboratory Reporting Limit

REMARKS: \* Measured in the field by client.  
Total Coliform Bacteria is within NY State and Federal  
limit for potable water

DIRECTOR



EcoTest Laboratories Inc  
377 Sheffield Ave  
North Babylon, NY 11703  
~~631 422-5777~~

LAB NO.105655.03

12/10/10

Brookhaven National Laboratory  
Bldg. 452, P.O. Box 5000  
Upton, NY 11973-5000  
ATTN: William Chaloupka PO#:0000143228

SOURCE OF SAMPLE: 045-12

SOURCE OF SAMPLE: 28939

COLLECTED BY: Client

DATE COL'D:12/07/10 RECEIVED:12/07/10

TIME COL'D:0900

MATRIX:W

SAMPLE: B-1005 RHIC  
28939-003

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME FLAG OF ANALYSIS	LRL	ANALYTICAL METHOD
T.Coli form, 100 mL		Absent	120710 1409	0	S189223
E.Coli, 100mL		Absent	120710 1409	0	S189223
Free Chlorine Resid.	mg/L	0.65	*		

cc:BNL, Robert J. Lee

LRL=laboratory Reporting Limit

REMARKS: \* Measured in the field by client.  
Total Coliform Bacteria is within NY State and Federal  
limit for potable water

DIRECTOR 

EcoTest Laboratories Inc  
377 Sheffield Ave  
North Babylon, NY 11703  
631 422-5777

LAB NO.105655.04

12/10/10

Brookhaven National Laboratory  
Bldg. 452, P.O. Box 5000  
Upton, NY 11973-5000  
ATTN: William Chaloupka PO#:0000143228

SOURCE OF SAMPLE: 109-19  
SOURCE OF SAMPLE: 28939  
COLLECTED BY: Client DATE COL'D:12/07/10 RECEIVED:12/07/10  
TIME COL'D:0700  
MATRIX:W SAMPLE: B-363 Apt. Laundry  
28939-004

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME	FLAG	OF ANALYSIS	LRL	ANALYTICAL METHOD
T.Coliform, 100 mL		Absent	120710 1409			0	S189223
E.Coli, 100mL		Absent	120710 1409			0	S189223
Free Chlorine Resid.	mg/L	0.47		*			

cc:BNL, Robert J. Lee

LRL=laboratory Reporting Limit

REMARKS: \* Measured in the field by client.  
Total Coliform Bacteria is within NY State and Federal  
limit for potable water

DIRECTOR





EcoTest Laboratories Inc  
377 Sheffield Ave  
North Babylon, NY 11703  
631 422-5777

LAB NO.105655.05

12/10/10

Brookhaven National Laboratory  
Bldg. 452, P.O. Box 5000  
Upton, NY 11973-5000  
ATTN: William Chaloupka PO#:0000143228

SOURCE OF SAMPLE: 075-602  
SOURCE OF SAMPLE: 28939  
COLLECTED BY: Client DATE COL'D:12/07/10 RECEIVED:12/07/10  
TIME COL'D:0631  
MATRIX:W SAMPLE: B-725 N.S.L.S.  
28939-005

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME	FLAG OF ANALYSIS	LRL	ANALYTICAL METHOD
T.Coliform, 100 mL		Absent	120710 1409	0		S189223
E.Coli, 100mL		Absent	120710 1409	0		S189223
Free Chlorine Resid.	mg/L	0.43		*		

cc:BNL, Robert J. Lee

LRL=laboratory Reporting Limit

REMARKS: \* Measured in the field by client.  
Total Coliform Bacteria is within NY State and Federal  
limit for potable water

DIRECTOR



EcoTest Laboratories Inc  
377 Sheffield Ave  
North Babylon, NY 11703  
631 422-5777

LAB NO.105655.06

12/10/10

Brookhaven National Laboratory  
Bldg. 452, P.O. Box 5000  
Upton, NY 11973-5000

ATTN: William Chaloupka

PO#:0000143228

SOURCE OF SAMPLE: 084-69

SOURCE OF SAMPLE: 28939

COLLECTED BY: Client

DATE COL'D:12/07/10 RECEIVED:12/07/10

TIME COL'D:0800

MATRIX:W

SAMPLE: B-490 Block 1 ACF  
28939-006

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME	FLAG OF ANALYSIS	LRL	ANALYTICAL METHOD
T.Coliiform, 100 mL		Absent	120710 1409		0	S189223
E.Coli, 100mL		Absent	120710 1409		0	S189223
Free Chlorine Resid.	mg/L	0.65		*		

cc:BNL, Robert J. Lee

LRL=laboratory Reporting Limit

REMARKS: \* Measured in the field by client.  
Total Coliiform Bacteria is within NY State and Federal  
limit for potable water

DIRECTOR



EcoTest Laboratories Inc  
377 Sheffield Ave  
North Babylon, NY 11703  
631 422-5777

LAB NO.105655.07

12/10/10

Brookhaven National Laboratory  
Bldg. 452, P.O. Box 5000  
Upton, NY 11973-5000

ATTN: William Chaloupka

PO#:0000143228

SOURCE OF SAMPLE: 084-68

SOURCE OF SAMPLE: 28939

COLLECTED BY: Client

DATE COL'D:12/07/10 RECEIVED:12/07/10

TIME COL'D:0820

MATRIX:W

SAMPLE: B-490 Block 4 MRC  
28939-006

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME	FLAG OF ANALYSIS	LRL	ANALYTICAL METHOD
T.Coliiform, 100 mL		Absent	120710 1409		0	S189223
E.Coli, 100mL		Absent	120710 1409		0	S189223
Free Chlorine Resid.	mg/L	0.41		*		

cc:BNL, Robert J. Lee

LRL=laboratory Reporting Limit

REMARKS: \* Measured in the field by client.  
Total Coliform Bacteria is within NY State and Federal  
limit for potable water

DIRECTOR



LAB NO.105655.08

12/10/10

Brookhaven National Laboratory  
Bldg. 452, P.O. Box 5000  
Upton, NY 11973-5000

ATTN: William Chaloupka

PO#:0000143228

SOURCE OF SAMPLE: 076-408

SOURCE OF SAMPLE: 28939

COLLECTED BY: Client

DATE COL'D:12/07/10 RECEIVED:12/07/10

TIME COL'D:0615

MATRIX:W

SAMPLE: Field Dup. B-640  
28939-008

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME	FLAG	OF ANALYSIS	LRL	ANALYTICAL METHOD
T.Coliiform, 100 mL		Absent	120710 1409			0	S189223
E.Coli, 100mL		Absent	120710 1409			0	S189223
Free Chlorine Resid.	mg/L	0.41		*			

cc:BNL, Robert J. Lee

LRL=laboratory Reporting Limit

REMARKS: \* Measured in the field by client.  
Total Coliform Bacteria is within NY State and Federal  
limit for potable water

DIRECTOR

rn = 32216

NYSDOH ID # 10320

Page 1 of 1



Environmental Protection Division  
81 Cornell Avenue, Bldg. 120  
Upton, NY 11973



**FACSIMILE TRANSMITTAL SHEET**

**Fax #: 631-344-6079**

<b>Date:</b>	<b>January 10, 2011</b>
<b>To:</b>	<b>Ms. Mary La Flair</b>
<b>Company:</b>	<b>Suffolk County Department of Health Services</b>
<b>Fax #:</b>	<b>631-852-5787</b>
<b>From:</b>	<b>Jennifer Higbie</b>
<b>Phone Ext.:</b>	<b>631-344-5919 (or email: Higbie@bnl.gov)</b>

<b>Number of Pages (including cover sheet):</b>	
---	--

**Comments:**

Attached is a letter from Robert Lee with the Subject: Monthly Water Treatment Plant reports for December 2010.

Included with the letter are

Attachment I: BNL Potable Water Supply Operational Data for December  
and

Attachment III: December 2010 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data and Bacteriological Analyses for the BNL Distribution System

EXPLORING EARTH'S MYSTERIES  
...PROTECTING ITS FUTURE

\*\*\*\*\*  
\*\*\* TX REPORT \*\*\*  
\*\*\*\*\*

TRANSMISSION OK

TX/RX NO 1392  
CONNECTION TEL 98525787  
CONNECTION ID  
ST. TIME 01/10 16:06  
USAGE T 09'04  
PGS. SENT 23  
RESULT OK

Environmental Protection Division  
81 Cornell Avenue, Bldg. 120  
Upton, NY 11973

**BROOKHAVEN**  
NATIONAL LABORATORY

**FACSIMILE TRANSMITTAL SHEET**

Fax #: 631-344-6079

Date:	January 10, 2011
To:	Ms. Mary La Flair
Company:	Suffolk County Department of Health Services
Fax #:	631-852-5787
From:	Jennifer Higbie
Phone Ext.:	631-344-5919 (or email: Higbie@bnl.gov)

Number of Pages (including cover sheet):	
--	--

**Comments:**

Attached is a letter from Robert Lee with the Subject: Monthly Water Treatment Plant reports for December 2010.

Included with the letter are

Attachment I: BNL Potable Water Supply Operational Data for December  
and

Attachment III: December 2010 Stage 1 Disinfectants & Disinfection Byproduct Rule Monitoring Data and Bacteriological Analyses for the BNL Distribution System